

## ANTENNA WITH PRINTED COMPENSATING CAPACITOR

### CROSS-REFERENCE TO RELATED APPLICATION

5 This application claims the priority benefits of U.S. provisional application titled  
"MINIATURING PRINTED ANTENNA WITH LOAD PRINTED CAPACITOR" filed  
on May 15, 2003, serial no. 60/470,906. All disclosure of this application is  
incorporated herein by reference.

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### BACKGROUND OF THE INVENTION

#### Field of Invention

[0001] The present invention relates to a communication antenna. More particularly, the present invention relates to an antenna with an additional capacitor, so as to reduce the dimension of the antenna and maintain the required LC coupling strength.

#### Description of Related Art

[0002] The wireless communication system always needs an antenna to transmit and receive RF signals. In recent years, the wireless communication technology has been well developed. For example, the cellular phone is one of the impressing apparatus in wireless communication. The dimension of the cellular phone require an antenna. In order to implement the antenna in compact space, a planar, a line inverted-F, or L-type antennas have been proposed. However, these conventional antennas are not implemented on the plane of a printed circuit board (PCB). Also the antenna has